

## ABSTRACT OF THE INVENTION

A grinding-band swaying device for a band grinding machine includes a motor pivotally connected with a machine base and driving an endless grinding  
5 band around two rollers and forming a fulcrum for swaying, a speed-reducing unit and an eccentric wheel. The speed-reducing unit is positioned under the motor, having a shaft connected with the eccentric wheel. An elastic compressing unit is provided between the  
10 speed-reducing unit or the motor and the machine base, and then the eccentric wheel is kept to elastically urge the machine base. When the motor together with the speed-reducing unit rotates the eccentric wheel, the speed-reducing unit, the motor and the roller sway  
15 regularly with the fulcrum and then the endless grinding band moves forward and also sways regularly synchronously to perform grinding against a work with grinding angles constantly altered to achieve balanced grinding result.

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